

## CLAIMS

I claim:

1. A method for estimating software project requirements, comprising the steps of:

computing a validity ratio for defects in an open state;

computing a fix rate for a team;

analyzing a software defect backlog that includes the defects in the open state, using the computed validity ratio and the computed fix rate.

2. The method of claim 1, wherein the validity ratio is computed using defect census data read from a defect census data repository.

3. The method of claim 1, wherein the fix rate is computed using team performance census data read from a team performance census data repository.

4. The method of claim 1, wherein the step of computing a validity ratio includes steps of adding numbers of defects in working, verify, and closed states, to provide a first sum; adding numbers of defects in the working, verify, and closed states and a number of defects in a canceled state, to provide a second sum; and dividing the first sum by the second sum, to provide the validity ratio.

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5. The method of claim 4, wherein the step of computing a fix rate includes steps of adding the number of defects in the close state and the number of defects in the verify state, to provide a third sum; and dividing the third sum by a number of working days, to provide the fix rate.

6. The method of claim 5, wherein the step of analyzing a software defect backlog includes a step of computing a drain date for the backlog, using the validity ratio and the fix rate.

7. The method of claim 6, wherein the step of computing a drain date includes steps of multiplying the number of defects in the open state by the validity ratio to provide a product; adding the product to the number of defects in the working state, to provide work left; dividing the work left by the fix rate, to provide days left; and adjusting the days left for non-working days, to provide the drain date.

8. The method of claim 5, wherein the step of analyzing a software defect backlog includes a step of computing a capacity of a team to fix defects, using the validity ratio and the fix rate.

9. The method of claim 8, wherein the step of computing a capacity includes steps of multiplying a number of working days by the fix rate, to provide a product; and dividing the product by the validity ratio, to provide the capacity.

10. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for estimating software project requirements, said method steps comprising:

computing a validity ratio for defects in an open state;

computing a fix rate for a team;

analyzing a software defect backlog that includes the defects in the open state, using the computed validity ratio and the computed fix rate.

11. The program storage device of claim 10, wherein the validity ratio is computed using defect census data read from a defect census data repository.

12. The program storage device of claim 10, wherein the fix rate is computed using team performance census data read from a team performance census data repository.

13. The program storage device of claim 10, wherein the step of computing a validity ratio includes steps of adding numbers of defects in working, verify, and closed states, to provide a first sum; adding the numbers of defects in the working, verify, and closed states and a number of defects in a canceled state, to provide a second sum; and dividing the first sum by the second sum, to provide the validity ratio.

14. The program storage device of claim 13, wherein the step of computing a fix rate includes steps of adding the number of defects in the closed state and the number of defects in the verify state, to provide a third sum; and dividing the third sum by a number of working days, to provide the fix rate.

15. The program storage device of claim 14, wherein the step of analyzing a software defect backlog includes a step of computing a drain date for the backlog, using the validity ratio and the fix rate.

16. The program storage device of claim 15, wherein the step of computing a drain date includes steps of multiplying the number of defects in the open state by the validity ratio, to provide a product; adding the product to the number of defects in the working state, to provide work left; dividing the work left by the fix rate, to provide days left; and adjusting the days left for non-working days, to provide the drain date.

17. The program storage device of claim 14, wherein the step of analyzing a software defect backlog includes a step of computing a capacity of a team to fix defects, using the validity ratio and the fix rate.

18. The program storage device of claim 17, wherein the step of computing a capacity includes steps of multiplying a number of working days by the fix rate, to provide a product; and dividing the product by the validity ratio, to provide the capacity.

19. Apparatus for estimating software project requirements, comprising:

a defect census data repository;

a team performance census data repository; and

an estimation engine for computing a validity ratio for defects in an open state, using information from the defect census data repository; computing a fix rate for a team, using information from the team performance census data repository; and analyzing a software defect backlog that includes the open defects, using the computed validity ratio and the computed fix rate.

20. The method of claim 19, wherein analyzing a software defect backlog includes computing a drain date for the backlog, using the validity ratio and the fix rate.

21. The method of claim 19, wherein analyzing a software defect backlog includes computing a capacity of a team to fix defects, using the validity ratio and the fix rate.